

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for address management of mobile nodes, said method comprising the steps of:

receiving a mobile IP message comprising a registration request message from a first mobile node;

assigning a first port range of globally unique port numbers to said first mobile node; and

transmitting said first port range of globally unique port numbers to said first mobile node.

2. (canceled)

3. (previously presented) The method of claim 1, further comprising the steps of:

assigning a network address to said first mobile node; and

transmitting said network address to said first mobile node.

4. (original) The method of claim 3, wherein said network address is an Internet Protocol (IP) address.

5. (original) The method of claim 3, wherein said network address can be shared with a second mobile node.

6. (canceled)

7. (currently amended) The method of claim 5, further comprising the step of:

assigning a second port range of globally unique port numbers to said second mobile node, wherein said first and second port ranges are disjoint.

8. (currently amended) ~~The method of claim 1;~~ A method for address management of mobile nodes, said method comprising the steps of:

receiving a registration request message from a first mobile node;

assigning a first range of globally unique port numbers to said first mobile node, wherein said first range of globally unique port numbers is defined by a low port number and a high port number; and ~~, said method further comprising the step of:~~

transmitting a registration reply message to said first mobile node, said registration reply message including a port range extension, said port range extension including said low port number and said high port number.

9. (original) The method of claim 1, wherein said registration request message includes a care-of address for said first mobile node.

10. (currently amended) The method of claim 9, further comprising the step of:

associating said care-of address with said first port range of globally unique port numbers.

11. (currently amended) The method of claim 9, further comprising the steps of:
assigning a network address to said first mobile node; and
associating said care-of address with said network address and said first port range of globally unique port numbers.

12. (currently amended) The method of claim 11, further comprising the steps of:
receiving data packets destined for said network address and a port number in said first port range of globally unique port numbers; and
forwarding said data packets to said care-of address.

13. (currently amended) A system for address management of mobile nodes, said mobile nodes including at least a first mobile and a second mobile node, said system comprising:
a home agent, said home agent transmitting mobile IP messages comprising registration reply messages in response to valid registration request messages; and
a home agent database accessible by said home agent, said home agent database containing at least a first data record and a second data record, said first data record identifying a network address and a first port range of globally unique port numbers for said first mobile node, said second data record identifying said network address and a second port range of globally unique port numbers for said second mobile node, wherein said first and second port ranges are disjoint.

14. (canceled)

15. (previously presented) The system of claim 13, wherein said first data record includes a care-of address for said first mobile node, said care-of address being different from said network address.

16. (previously presented) The system of claim 13, wherein said network address is an Internet Protocol (IP) address.

17. (currently amended) The system of claim 15, further comprising:
a foreign agent, coupled to said home agent via an intermediate network; and
a foreign agent database accessible by said foreign agent, said foreign agent database containing a visitor data record for said first mobile node, said visitor data record including said network address and said first set port range of ~~one or more~~ globally unique port numbers for said first mobile node.

18. (previously presented) The system of claim 17, wherein said visitor data record includes a local address of said first mobile station.

19. (previously presented) The system of claim 17, wherein said care-of address is an Internet Protocol (IP) address.

20. (previously presented) The system of claim 19, wherein said care-of address is an external IP address associated with said foreign agent.

21. (previously presented) The system of claim 17, wherein said visitor data record includes an IP address of said home agent.

22. (new) The method of claim 1, wherein said first port range of globally unique port numbers is defined by a low port number and a high port number.

23. (new) The system of claim 13,
wherein said first range of globally unique port numbers is defined by a low port number and a high port number; and

wherein said second port range of globally unique port numbers is defined by a low port number and a high port number.